# **EAST Search History**

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	25	(gomez adj robert.inv.)	US-PGPUB; USPAT	OR	OFF	2007/03/15 21:36
<b>L2</b>	4	(jolly adj samson.inv.)	US-PGPUB; USPAT	OR	OFF	2007/03/15 21:36
L3	22	(lim adj john.inv.)	US-PGPUB; USPAT	OR	OFF	2007/03/15 21:37
L4	40	(su adj dai-shi.inv.)	US-PGPUB; USPAT	OR ·	OFF	2007/03/15 21:37

3/15/07 9:40:04 PM Page 1

# **EAST Search History**

Ref #	· Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	25	(gomez adj robert.inv.)	US-PGPUB; USPAT	OR	OFF	2007/03/15 21:36
L2	4	(jolly adj samson.inv.)	US-PGPUB; USPAT	OR	OFF	2007/03/15 21:36
L3	22	(lim adj john.inv.)	US-PGPUB; USPAT	OR	OFF	2007/03/15 21:37
L4	40	(su adj dai-shi.inv.)	US-PGPUB; USPAT	OR	OFF	2007/03/15 21:37

3/15/07 9:38:13 PM Page 1

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NEWS 15 DEC 18
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NEWS 17.
        DEC 27
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        JAN 08
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        JAN 16
NEWS 19
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NEWS 20
        JAN 16
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NEWS 21
        JAN 16
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NOVEMBER 10 CURRENT WINDOWS VERSION IS V8.01c, CURRENT NEWS EXPRESS MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),

AND CURRENT DISCOVER FILE IS DATED 25 SEPTEMBER 2006.

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SINCE FILE TOTAL ENTRY SESSION 0.21 0.21

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=> file hcaplus

COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 0.45 0.66

FULL ESTIMATED COST

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FILE COVERS 1907 - 15 Mar 2007 VOL 146 ISS 12 FILE LAST UPDATED: 14 Mar 2007 (20070314/ED)

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This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s aminocyclopropanecarboxamide

9 AMINOCYCLOPROPANECARBOXAMIDE

1 AMINOCYCLOPROPANECARBOXAMIDES

L1 9 AMINOCYCLOPROPANECARBOXAMIDE

(AMINOCYCLOPROPANECARBOXAMIDE OR AMINOCYCLOPROPANECARBOXAMIDES)

=> s ll and bradyknin antagonist?

0 BRADYKNIN

244459 ANTAGONIST?

O BRADYKNIN ANTAGONIST?

(BRADYKNIN(W)ANTAGONIST?)

L2 0 L1 AND BRADYKNIN ANTAGONIST?

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199 BRADYKININS

18100 BRADYKININ

(BRADYKININ OR BRADYKININS)

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244459 ANTAGONIST?

L4 2 L3 AND ANTAGONIST?

=> s 14 and review/dt

2010319 REVIEW/DT

L5 0 L4 AND REVIEW/DT

=> d 14, ibib abs hitstr, 1-2

L4 ANSWER 1 OF 2 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2005:1004708 HCAPLUS

DOCUMENT NUMBER: 143:306182

TITLE: Preparation of 1-aminocyclopropane-1-carboxamide

derivatives as bradykinin B1

antagonists

Bock, Mark G.; Feng, Dong-Mei; Kuduk, Scott INVENTOR(S):

1

PATENT ASSIGNEE(S):

Merck & Co., Inc., USA PCT Int. Appl., 40 pp.

SOURCE: CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

FAMILY ACC. NUM. COUNT:

English

PATENT INFORMATION:

KIND DATE APPLICATION NO. PATENT NO. \_\_\_\_ \_\_\_\_\_\_ \_\_\_\_\_ \_\_\_\_\_\_ WO 2005-US6230 WO 2005085198 A2 20050915 20050225 20051124 WO 2005085198 А3 AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, W: CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG AU 2005219836 A1 20050915 AU 2005-219836 20050225 20050915 CA 2005-2557858 20050225 CA 2557858 A1 20061122 EP 2005-714101 20050225 EP 1723143 A2 AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, LV 20070307 CN 2005-80006734 20050225 CN 1926136 Α

US 2004-549379P

WO 2005-US6230

P 20040302 W 20050225

OTHER SOURCE(S):

PRIORITY APPLN. INFO.:

MARPAT 143:306182

GΙ

Title compds. I [wherein Rla, Rlb, Rlc = H or F; R2 = H or Cl; R3 = Cl or AB F; R4 = (un)substituted (cyclo)alkyl, aryl or heterocycle, or pharmaceutically acceptable salts thereof] were prepared as antagonists or inverse agonists of bradykinin receptors, especially as antagonists of bradykinin receptor B1. For instance, II was synthesized by acylation of dihydrochloride salt of the corresponding cyclopropanamine with 5-methylisoxazole-3-carbonyl chloride in the presence of DIPEA. I exhibited affinity for the B1 receptor with IC50 values of  $< 5\mu M$ . Therefore, I and their pharmaceutical compns. (examples given) are useful in the treatment or prevention of symptoms. such as pain and inflammation associated with the bradykinin B1 pathway.

ΙI

ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

2005:158641 HCAPLUS

DOCUMENT NUMBER:

142:261546

TITLE:

Preparation of sulfonyl substituted N-(biarylmethyl)

aminocyclopropanecarboxamides as bradykinin B1 antagonists or inverse

agonists -

INVENTOR(S):

Anthony, Neville J.; Gomez, Robert; Jolly, Samson M.;

Lim, John Jin; Su, Dai-shi

PATENT ASSIGNEE(S):

Merck & Co., Inc., USA

SOURCE:

PCT Int. Appl., 57 pp. CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.

KIND DATE APPLICATION NO.

DATE

GΙ

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WO 2005016886
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                                                                         20040803
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                            Т
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                                                                         20060118
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                                                US 2003-493146P
                                                                         20030807
PRIORITY APPLN. INFO.:
                                                US 2003-493257P
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                                                                         20040803
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OTHER SOURCE(S):
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 $R4?$ 
 $R4?$ 
 $R6?$ 
 $R6$ 

N-(Sulfonyloxybiarylmethyl)aminocyclopropanecarboxamide derivs.

(I) [R1, R2 = H, C1-4 alkyl; R3a, R3b = H, (un)substituted C1-4 alkyl; R4a, R4b = H, halogen, (un)substituted C1-4 alkyl; or R4a and R4b together with the carbon atom to which they are both attached form an (un)substituted exocyclic methylene; R5 = each (un)substituted C1-6 alkyl, C3-8 cycloalkyl, C3-6 alkynyl, C2-6 alkenyl, (CH2)k-aryl, (CH2)k-heterocycle; R6a = -OSO2R8, -NR8aSO2R9, -C(R8b)(R8c)SO2R9; R6b, R6c, R6d = H, halogen, OSO2R8, (un)substituted C1-4 alkyl, cyano, nitro, ORa, CO2Ra, or when attached to adjacent carbon atoms R6C and R6d together with the carbon atoms to which they are attached form a 5- to 8-membered saturated or unsatd. ring; R7 = H, halogen, cyano, nitro, ORa, CO2Ra, C(O)NRbRc, (un)substituted C1-4 alkyl; R8 = H, each (un)substituted C1-4

```
alkyl, (CH2)k-aryl, or NH2; R8a, R8b, R8c = H, (un) substituted C1-4 alkyl;
     or when R6a and R6b are attached to adjacent atoms, R8a and R6b together
     complete 5- or 6-membered ring; R9 = each (un)substituted C1-4 alkyl,
     aryl, or (CH2)k-aryl; Ra, Rb, Rc = H, each Cl-4 alkyl or Ph, C3-6
     cycloalkyl; or NRbRc together forms a cyclic imide or a 4-, 5-, or
     6-membered ring optionally containing an addnl. heteroatom selected from N, O, and S; X = CH, N; Y = C, S(O); k = 0, 1, 2]. These compds. are
     bradykinin Bl antagonists or inverse agonists useful in
     the treatment or prevention of symptoms such as pain and inflammation
     associated with the bradykinin Bl pathway. Thus,
     N-[1-[[[2-fluoro-4-(4,4,5,5-tetramethyl-1,3,2-dioxaborolan-2-
     yl)benzyl]amino]carbonyl]cyclopropyl]pyrimidine-5-carboxamide was coupled
     with 1-bromo-3-fluoro-2-methoxybenzene in the presence of
     tetrakis(triphenylphosphine)palladium(0) and potassium phosphate at
     110° for 16 h to give N-[1-[[[(3,3'-difluoro-2'-methoxy-1,1'-
     biphenyl-4-yl)methyl]amino]carbonyl]cyclopropyl]pyrimidine-5-carboxamide
     which was treated with boron tribromide in CH2Cl2 at room temperature for 48 h
     to give N-[1-[[[(3,3'-difluoro-2'-hydroxy-1,1'-biphenyl-4-
     yl)methyl]amino]carbonyl]cyclopropyl]pyrimidine-5-carboxamide (II). II
     was stirred with tifluoromethanesulfonic anhydride in the presence of Et3N
     in CH2Cl2 at room temperature for 2 h to give
3,3'-difluoro-4'-[[[[1-[(pyrimidin-
     5-ylcarbonyl)amino]cyclopropyl]carbonyl]amino]methyl]-1,1'-biphenyl-2-yl
     trifluoromethanesulfonate (III).
REFERENCE COUNT:
                                THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS
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                                RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT
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        18069 BRADYKININ
           199 BRADYKININS
         18100 BRADYKININ
                  (BRADYKININ OR BRADYKININS)
        244459 ANTAGONIST?
           650 BRADYKININ (W) ANTAGONIST?
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     ANSWER 1 OF 12 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER:
                          2006:1220368 HCAPLUS
DOCUMENT NUMBER:
                          146:54563
TITLE:
                          Pharmacologic targets and prototype therapeutics in
                          the kallikrein-kinin system: bradykinin receptor
                          agonists or antagonists
AUTHOR(S):
                          Sharma, J. N.; Al-Sherif, G. J.
CORPORATE SOURCE:
                          Department of Applied Therapeutics, Faculty of
                          Pharmacy, Health Sciences Centre, Kuwait University,
                          Safat, 13110, Kuwait
```

The Scientific World (2006), 6(Oct.), 1247-1261 CODEN: THESAS; ISSN: 1532-2246 SOURCE:

URL: http://www.thescientificworld.com/headeradmin/upl

oad/2006.01.226.pdf

The Scientific World, Inc. PUBLISHER:

Journal; General Review; (online computer DOCUMENT TYPE:

file)

LANGUAGE: English

A review. The kallikrein-kinin system (KKS) is a complex system produced in various organs. This system includes kininogen (precursor for kinin), kallikreins, and pharmacol. active bradykinin (BK), which is considered to be proinflammatory and/or cardioprotective. It is a proinflammatory polypeptide that is involved in many pathol. conditions and can cause pain, inflammation, increased vascular permeability, vasodilation, contraction of various smooth muscles, as well as cell proliferation. On the other hand, it has been shown that BK has cardioprotective effects, as all components of KKS are located in the cardiac muscles. Numerous observations have indicated that decreased activity of this system may lead to cardiovascular diseases, such as hypertension, cardiac failure, and myocardial infarction. BK acts on two receptors, B1 and B2, which are linked physiol. through their natural stimuli and their common participation in a variety of inflammatory responses. Recently, numerous BK antagonists have been developed in order to treat several diseases that are due to excessive BK formation. Although BK has many beneficial effects, it has been recognized to have some undesirable effects that can be reversed with BK antagonists. In addition, products of this system have multiple interactions with other important metabolic pathways, such as the renin-angiotensin system.

REFERENCE COUNT: THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 2 OF 12 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2004:382377 HCAPLUS

DOCUMENT NUMBER: 141:16720

TITLE: Bradykinin antagonists: discovery

and development

AUTHOR(S): Stewart, John M.

Department of Biochemistry, University of Colorado CORPORATE SOURCE:

Medical School, Denver, CO, 80262, USA

SOURCE: Peptides (New York, NY, United States) (2004), 25(3),

527-532

CODEN: PPTDD5; ISSN: 0196-9781

Elsevier Science Inc. PUBLISHER: DOCUMENT TYPE: Journal; General Review

LANGUAGE: English

A review. Practical bradykinin antagonists were discovered in 1984 by Vavrek and Stewart and reported in "Peptides." At that time there was already much evidence for involvement of bradykinin in inflammation and pain, so the specific, competitive antagonists were widely accepted and applied. The key to conversion of bradykinin into an antagonist was replacement of the proline residue at position 7 with a d-aromatic amino acid. Other modifications converted the initial weak antagonists into modern peptides which are totally resistant to all degrading enzymes, are orally available, and have been used in clin. trials. Non-peptide bradykinin antagonists have also

been developed.

REFERENCE COUNT: 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 3 OF 12 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2003:246324 HCAPLUS

DOCUMENT NUMBER: 139:270066

TITLE: Topical and peripherally acting analgesics

AUTHOR(S): Sawynok, Jana

CORPORATE SOURCE: Department of Pharmacology, Dalhousie University,

Halifax, NS, Can.

SOURCE: Pharmacological Reviews (2003), 55(1), 1-20

CODEN: PAREAQ; ISSN: 0031-6997

PUBLISHER: American Society for Pharmacology and Experimental

Therapeutics

DOCUMENT TYPE: Journal; General Review

LANGUAGE: English

A review. Acute nociceptive, inflammatory, and neuropathic pain all depend to some degree on the peripheral activation of primary sensory afferent neurons. The localized peripheral administration of drugs, such as by topical application, can potentially optimize drug concns. at the site of origin of the pain, while leading to lower systemic levels and fewer adverse systemic effects, fewer drug interactions, and no need to titrate doses into a therapeutic range compared with systemic administration. Primary sensory afferent neurons can be activated by a range of inflammatory mediators such as prostanoids, bradykinin, ATP, histamine, and serotonin, and inhibiting their actions represents a strategy for the development of analgesics. Peripheral nerve endings also express a variety of inhibitory neuroreceptors such as opioid,  $\alpha$ -adrenergic, cholinergic, adenosine and cannabinoid receptors, and agonists for these receptors also represent viable targets for drug development. At present, topical and other forms of peripheral administration of nonsteroidal anti-inflammatory drugs, opioids, capsaicin, local anesthetics, and  $\alpha$ -adrenoceptor agonists are being used in a variety of clin. states. There also are some clin. data on the use of topical antidepressants and glutamate receptor antagonists. are preclin. data supporting the potential for development of local formulations of adenosine agonists, cannabinoid agonists, cholinergic ligands, cytokine antagonists, bradykinin antagonists, ATP antagonists, biogenic amine antagonists, neuropeptide antagonists, and agents that alter the availability of nerve growth factor. Given that activation of sensory neurons involves multiple mediators, combinations of agents targeting different mechanisms may be particularly useful. Topical analgesics represent a promising area for future drug development. REFERENCE COUNT: THERE ARE 362 CITED REFERENCES AVAILABLE FOR 362

L8 ANSWER 4 OF 12 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2002:148931 HCAPLUS

DOCUMENT NUMBER: 136:145353

TITLE: Bradykinin antagonist: current

status and perspective

FORMAT

AUTHOR(S): Hirayama, Yoshitaka; Kayakiri, Hiroshi

CORPORATE SOURCE: Medicinal Biology Research Laboratories, Fujisawa

Pharmaceutical Co., Ltd., Yodogawa-ku, Osaka,

THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

532-8514, Japan

SOURCE: Nippon Yakurigaku Zasshi (2002), 119(1), 45-53

CODEN: NYKZAU; ISSN: 0015-5691

PUBLISHER: Nippon Yakuri Gakkai DOCUMENT TYPE: Journal; General Review

LANGUAGE: Japanese

AB A review. The kallikrein-kinin system plays an important role in many

SOURCE:

physiol. and pathophysiol. conditions such as homeostasis of circulation, inflammation/allergy, pain, shock, etc. Two types of kinin receptor are known, bradykinin (BK) Bl receptor and BK B2 receptor. receptors are constitutively expressed and mediate most physiol. actions of kinins, whereas B1 receptors are highly inducible upon inflammatory stimulation or tissue injury, suggesting that they are involved in inflammation and/or nociception. Only three peptide type B2 antagonists, NPC 567, CP-0127, and HOE-140, have been evaluated in clin. studies so far, and some beneficial effects of B2 antagonists have been shown for rhinitis, asthma, systemic inflammatory response syndrome/sepsis, and brain injury. However, the results were less convincing than expected. Now several potent and orally active nonpeptide B2-receptor antagonists have been found, which are expected to overcome the weak point of the peptide type antagonists and clarify the therapeutic potential of the B2-receptor antagonist for novel indications as well as those mentioned above. As for B1 receptors, no antagonist has been tested in a clin. The important role of B1 receptors is just being elucidated by use of peptide type antagonists or B1 receptor gene knockout mice. The further development of newer Bl antagonists and clin. evaluation is desired.

ANSWER 5 OF 12 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2001:298214 HCAPLUS

134:294182 DOCUMENT NUMBER:

Inflammation-allergy and prostanoids. (1) Prostanoids TITLE:

in experimental inflammatory reaction

Ueno, Akinori; Ohishi, Sachiko AUTHOR(S):

Dep. Pharmacol., Sch. Pharm. Sci., Kitasato Univ., CORPORATE SOURCE: 5-9-1 Shirokane, Minato-ku, Tokyo, 108-8642, Japan

Nippon Yakurigaku Zasshi (2001), 117(4), 255-261

CODEN: NYKZAU; ISSN: 0015-5691

PUBLISHER: Nippon Yakuri Gakkai DOCUMENT TYPE: Journal; General Review

LANGUAGE: Japanese

It is known that prostaglandins (PGs) modify the A review with 22 refs. inflammatory reaction in concert with other biol. active mediators. However, characteristics of these interactions or modulating actions have not yet been clarified well. Recently, the production of mice with specific receptor deficiencies by using the gene targeting procedure for PG receptors has accelerated elucidation of the roles of PGs through correlation of their phenotypes and exptl. features. Here I discuss roles of PGs in exptl. paw edema, the writhing reaction of a pain model, and regulation of cytokine formation, as determined using some PG-receptor-deficient mice. From the experiment of carrageenin-induced paw edema in IP receptor-deficient mice, with an indomethacin or bradykinin antagonist, we conclude that bradykinin initially induces paw swelling and then stimulates the release PGI2, which in turn enhances the swelling with bradykinin. By comparing the writhing responses in IP-deficient and wild-type mice, we found that PGI2 is a main mediator for this pain reaction. However, in the LPS-pretreated mice, not only PGI2 but also other PGs produced by COX-2 may be involved in pain induction. Formation of  $TNF\alpha$  and IL-10 was modified with PGI2 or PGE2; the formation of TNF $\alpha$  was down-regulated by the stimulation via IP-, EP2- or EP4 receptor, but that of IL-10 was up-regulated by these receptors, resulting in an anti-inflammatory effect.

ANSWER 6 OF 12 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2000:584130 HCAPLUS

DOCUMENT NUMBER: 133:246693

TITLE: Bradykinin antagonists: new

opportunities

AUTHOR(S): Bock, Mark G.; Longmore, Jeanette

CORPORATE SOURCE: Merck Research Laboratories, West Point, PA, 19486,

USA

SOURCE: Current Opinion in Chemical Biology (2000), 4(4),

401-406

CODEN: COCBF4; ISSN: 1367-5931

PUBLISHER: Elsevier Science Ltd.

DOCUMENT TYPE: Journal; General Review

LANGUAGE: English

AB A review with 40 refs. The pro-inflammatory, pain producing,

and cardiovascular effects of bradykinin B2 receptor activation are well characterized. Bradykinin B1 receptors also produce inflammation and

pain. Therefore, antagonists are expected to be

anti-inflammatory/analgesic drugs. Other exploitable clin. opportunities may exist. The newly discovered non-peptide B2 receptor antagonists and the equivalent B1 receptor pharmacol. agents, which are in the pipeline, are

suitable preclin. tools to properly evaluate potential utilities.

REFERENCE COUNT: 40 THERE ARE 40 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 7 OF 12 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2000:324230 HCAPLUS

DOCUMENT NUMBER: 133:83738

TITLE: Kallikrein-kinin system in acute pancreatitis:

potential of B2-bradykinin

antagonists and kallikrein inhibitors

AUTHOR(S): Griesbacher, Thomas

CORPORATE SOURCE: Department of Experimental and Clinical Pharmacology,

University of Graz, Graz, A-8010, Austria

SOURCE: Pharmacology (2000), 60(3), 113-120

CODEN: PHMGBN; ISSN: 0031-7012

PUBLISHER: S. Karger AG

DOCUMENT TYPE: Journal; General Review

LANGUAGE: English

AB A review with 36 refs. The development of selective antagonists for bradykinin B2 receptors has greatly advanced research on the role of the kallikrein-kinin system in acute pancreatitis. Kinins released during the course of the inflammatory injury are the major cause of the vascular symptoms, i.e. pancreatic edema formation and its consequences, such as hemoconcn., hypovolemia and hypotension. Kinins are also involved in the accumulation of potentially cytotoxic factors in the pancreatic tissue. However, treatment with B2 antagonists must begin prior to the formation of pancreatic edema to inhibit or attenuate the vascular effects. Visceral pain as a possible target symptom for treatment with B2 antagonists at later time points is suggested by the B2 receptor-mediated activation of nociceptive afferents.

REFERENCE COUNT: 36 THERE ARE 36 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 8 OF 12 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1997:492671 HCAPLUS

DOCUMENT NUMBER: 127:170901

TITLE: Nonconventional analgesics: bradykinin

antagonists

AUTHOR(S): Elguero, Jose; Rozas, Isabel

CORPORATE SOURCE: Instituto de Quimica Medica (C. S. I. C.), Spain SOURCE: Anales de la Real Academia de Farmacia (1997), 63(1),

173-190

CODEN: ARAFAY; ISSN: 0034-0618

PUBLISHER: Real Academia de Farmacia DOCUMENT TYPE: Journal; General Review

LANGUAGE: Spanish

A review with 34 refs. Bradykinin and kallidin, "kinins", are generated by the activity of kallikreins (proteolytic enzymes) on kininogens. Kinins elicit pathophysiol. responses including pain and hyperalgesia. Kinins receptors are classified according to the relative potencies of agonist and antagonists. Regoli and Barabe proposed two subtypes of receptors, B1 and B2. Hundreds of agonists analogs of bradykinin were prepared before the first antagonist compds. appeared. Synthetic efforts have been oriented towards peptidic analogs until few years ago when the search of non-peptidic antagonists started. distribution of receptor B1 in the human being is very limited and probably this subtype plays an unimportant role on human diseases. generation of peptidic antagonists of the B2 receptor have been developed. The second generation has compds. two orders of magnitude more potent as analgesics than the first generation ones and the most important derivative was icatibant. The first non-peptidic antagonist of the B2 receptor, described in 1993, has two phosphonium cations separated by a modified amino acid. Many derivs. of this dication have been prepared Another non-peptidic compound antagonist of B2 is the natural product Martinelline. Mol. modeling and QSAR studies have been carried out on bradykinin as well as on its antagonists.

L8 ANSWER 9 OF 12 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1995:873978 HCAPLUS

DOCUMENT NUMBER: 123:275023

TITLE: Kinin receptor antagonists: unique probes in basic and

clinical research

AUTHOR(S): Wirth, Klaus J.; Heitsch, Holger; Schoelkens, Bernward

Α.

CORPORATE SOURCE: HR PGU Cardiovascular Agents, Frankfurt am Main,

D-65926, Germany

SOURCE: Canadian Journal of Physiology and Pharmacology

(1995), 73(7), 797-804

CODEN: CJPPA3; ISSN: 0008-4212

National Research Council of Canada

DOCUMENT TYPE: Journal; General Review

LANGUAGE: English

A review with  $\approx$  50 refs. The availability of potent and stable bradykinin antagonists has had a tremendous impact on kinin research. This article reviews the current status of research on kinin antagonists, describes their chemical properties, and delineates recent advances that have occurred with the advent of the second generation of kinin antagonists. The data collected with these antagonists support the assumption that kinins ar implicated in inflammation and tissue injury as endogenous agents. Their importance, however, is not limited to the role as mediators of tissue injury and inflammation, as kinin antagonists have enabled the identification of kinins as potential endogenous cardioprotective substances, also contributing to the effects of angiotensin converting enzyme inhibitors. Clin. studies are currently being performed in asthma, postoperative pain, anaphylactoid reactions during low d. lipoprotein apheresis, systemic inflammation response syndrome, and suspected sepsis, head injury, and hantavirus infections to investigate the utility of kinin antagonists as therapeutic agents.

PUBLISHER:

L8 ANSWER 10 OF 12 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1993:401036 HCAPLUS

DOCUMENT NUMBER: 119:1036

TITLE: Therapeutic prospects of bradykinin receptor

antagonists

AUTHOR(S): Sharma, J. N.

CORPORATE SOURCE: Sch. Med. Sci., Univ. Sains Malaysia, Kubang Kerian,

16150, Malay.

SOURCE: General Pharmacology (1993), 24(2), 267-74

CODEN: GEPHDP; ISSN: 0306-3623

DOCUMENT TYPE: Journal; General Review

LANGUAGE: English

A review with 77 refs. Bradykinin (BK) and related kinins may act on 4 types of receptors designated as B1, B2, B3, and B4. It seems that the B2 receptors are most commonly found in various vascular and non-vascular smooth muscles, whereas B1 receptors are formed in vitro during trauma, and injury, and are found in bone tissues. These BK receptors are involved in the regulations of various physiol. and pathol. processes. The mode of kinin actions are based upon the interactions between the kinin and their specific receptors, which can led to activation of several second-messenger systems. Numerous BK receptor antagonists have been synthesized with prime aim to treat diseases caused by excessive kinin production These diseases are RA, inflammatory diseases of the bowel, asthma, rhinitis and sore throat, allergic reactions, pain, inflammatory skin disorders, endotoxin and anaphylactic shock and coronary heart diseases. On the other hand, BK receptor antagonists could be contraindicated in hypertension, since these drugs may antagonize the antihypertensive therapy and/or may trigger the hypertensive crisis. It is worth suggesting that the BK receptor agonists might be useful antihypertensive drugs.

L8 ANSWER 11 OF 12 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1991:506210 HCAPLUS

DOCUMENT NUMBER: 115:106210

TITLE: Nonopioid molecular signaling mechanisms involved in

nociception and antinociception

AUTHOR(S): Dray, A.; Wood, J. N.

CORPORATE SOURCE: Sandoz Inst. Med. Res., London, WC1D 6BN, UK

SOURCE: Life Sciences Research Report (1991), 49 (Towards New

Pharmacother. Pain), 21-34 CODEN: LSRPD8; ISSN: 0340-8132

DOCUMENT TYPE: Journal; General Review

LANGUAGE: English

A review with 32 refs. Studies of the sensitization and activation of nociceptive sensory neurons have identified some of the mol. mechanisms that underlie the primary events which may result in the sensation of pain. Nociceptive sensory neurons are activated by several endogenous ligands, either through ligand-gated ion channels (e.g., 5-HT, ATP) or through intracellular second messengers (e.g., bradykinin); neuronal excitability is regulated by a host of eicosanoids, cytokines, and neuropeptides, by as yet ill-defined mechanisms. Intracellular second messengers which alter the phosphorylation states of ion channels and pumps are likely to contribute to these actions. Novel analgesic drugs that act peripherally may thus be targeted at ion channels and receptors (e.g., bradykinin antagonists), at second message levels, or as selective inhibitors of specific kinases (e.g., calphostin). Recently, novel analgesic drugs based on the selective excitotoxin capsaicin have also been developed. The mol. mechanisms underlying these events are discussed.

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ANSWER 12 OF 12 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER:
                         1991:421390 HCAPLUS
DOCUMENT NUMBER:
                         115:21390

    Bradykinin antagonists in

TITLE:
                         pain and inflammation
                         Steranka, Larry R.; Burch, Ronald M.
AUTHOR(S):
                         Nova Pharm. Corp., Baltimore, MD, USA
CORPORATE SOURCE:
                         Inflammatory Disease and Therapy (1990), 5(Bradykinin
SOURCE:
                         Antagonists), 191-211
                         CODEN: IDITE8; ISSN: 1047-5028
                         Journal; General Review
DOCUMENT TYPE:
LANGUAGE:
                         English
     A review with 74 refs. discussing the effects of peptide
     bradykinin antagonists and certain kallikrein inhibitors
     on models of inflammation and pain.
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     FILE 'REGISTRY' ENTERED AT 15:11:13 ON 15 MAR 2007
     FILE 'HCAPLUS' ENTERED AT 15:11:17 ON 15 MAR 2007
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L1
L2
              0 S L1 AND BRADYKNIN ANTAGONIST?
              2 S L1 AND BRADYKININ
L3
              2 S L3 AND ANTAGONIST?
L4
              0 S L4 AND REVIEW/DT
L5
1.6
            650 S BRADYKININ () ANTAGONIST?
L7
             77 S L6 AND PAIN
             12 S L7 AND REVIEW/DT
1.8
=> s 16 and postherpetic () neuropathy?
           375 POSTHERPETIC
         12604 NEUROPATHY?
             1 · POSTHERPETIC (W) NEUROPATHY?
L9
             O L6 AND POSTHERPETIC (W) NEUROPATHY?
=> s 16 and osteoarthritis?
          8812 OSTEOARTHRITIS?
             6 L6 AND OSTEOARTHRITIS?
L10
=> s 110 and review/dt
       2010319 REVIEW/DT
             O L10 AND REVIEW/DT
L11
=> s 16 and dental () pain?
         48023 DENTAL
             6 DENTALS
         48024 DENTAL
                 (DENTAL OR DENTALS)
        149167 PAIN?
           201 DENTAL (W) PAIN?
L12
             0 L6 AND DENTAL (W) PAIN?
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     FILE 'REGISTRY' ENTERED AT 19:10:46 ON 14 MAR 2007
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            15 S L1
347 S L1 FULL
L2
L3
     FILE 'HCAPLUS' ENTERED AT 19:16:20 ON 14 MAR 2007
              7 S L3
L4
              O S L4 AND NEVILLE, A?/AU
L5
              1 S L4 AND GOMEZ, R?/AU
L6
              6 S L4 NOT L6
L7
              0 S L7 AND JOLLY, S?/AU
L8
              0 S L7 AND LIM, J?/AU
L9
              2 S L7 AND SU, D?/AU
L10
              4 S L7 NOT L10
L11
              0 S L11 AND ANTHONY, N?/AU
L12
     FILE 'CAOLD' ENTERED AT 19:19:31 ON 14 MAR 2007
=> s 13
             0 L3
L13
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                     16
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                                 21
                                     22
                                         26
ring nodes :
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                         13
                             14
                                 30
                                     31
                                         32
                                            33
                                                34
                                                    35
   1 2 3 4 5 6
chain bonds :
             8-9 9-10
                         10-11
                                10-12
                                       12-15
                                             15-20
                                                    15-26
                                                           16-17
   3-8 6-32
ring bonds :
                                                     30-31
    1-2 1-6 2-3 3-4
                       4-5
                            5-6
                                 12-13
                                       12-14 13-14
                                                            30-35
                                                                   31 - 32
    32-33 33-34 34-35
exact/norm bonds :
   1-2 1-6 2-3 3-4
                       3-8 4-5 5-6
                                      6-32 8-9 9-10
                                                      10-11 10-12
                       15-20 15-26
                                     16-17 20-21
   12-14 12-15 13-14
normalized bonds :
    30-31
          30-35 31-32
                        32-33 33-34
                                     34 - 35
isolated ring systems :
   containing 1 : 12 :
G1:C, N
G2:SO2,[*1]
G3:H,[*2]
Connectivity:
   22:1 M minimum RC ring/chain
Match level :
   1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 8:CLASS
                                                           9:CLASS
                                                                   10:CLASS
   11:CLASS 12:Atom 13:Atom 14:Atom 15:CLASS 16:CLASS
                                                           17:CLASS 20:CLASS
   21:CLASS 22:CLASS 26:CLASS 30:Atom 31:Atom 32:Atom
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   35:Atom
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chain nodes :

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chain nodes :
   8 9 10 11 15
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ring nodes :
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chain bonds :
    3-8 6-32
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ring bonds :
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    1-2 1-6 2-3 3-4 4-5 5-6
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exact/norm bonds :
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12-14 12-15 13-14
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                                      16-17
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normalized bonds :
          30-35 31-32
    30-31
                        32-33 33-34
                                      34 - 35
isolated ring systems :
    containing 1 : 12 :
G1:C, N
G2:SO2,[*1]
G3:H,[*2]
Connectivity:
   22:1 M minimum RC ring/chain
Match level :
   1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 8:CLASS
                                                           9:CLASS
                                                                    10:CLASS
    11:CLASS 12:Atom 13:Atom 14:Atom 15:CLASS 16:CLASS
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    21:CLASS
             22:CLASS 26:CLASS 30:Atom 31:Atom 32:Atom
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   35:Atom
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LOGINID:ssspta1612bxr

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

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                 Web Page URLs for STN Seminar Schedule - N. America
NEWS
      1
                 "Ask CAS" for self-help around the clock
NEWS
      2
                 The Derwent World Patents Index suite of databases on STN
         OCT 23
NEWS
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                 has been enhanced and reloaded
         OCT 30
                 CHEMLIST enhanced with new search and display field
NEWS
                 JAPIO enhanced with IPC 8 features and functionality
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         NOV 10
                 CA/CAplus F-Term thesaurus enhanced
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      6
                 STN Express with Discover! free maintenance release Version
         NOV 10
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                 8.01c now available
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                 to 50,000
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                 CAS REGISTRY updated with new ambiguity codes
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     9
NEWS 10
         DEC 11
                 CAS REGISTRY chemical nomenclature enhanced
NEWS 11
         DEC 14
                 WPIDS/WPINDEX/WPIX manual codes updated
NEWS 12
         DEC 14
                 GBFULL and FRFULL enhanced with IPC 8 features and
                 functionality
                 CA/CAplus pre-1967 chemical substance index entries enhanced
NEWS 13
        DEC 18
                 with preparation role
                 CA/CAplus patent kind codes updated
NEWS 14
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NEWS 15 DEC 18
                 MARPAT to CA/CAplus accession number crossover limit increased
                 to 50,000
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                 MEDLINE updated in preparation for 2007 reload
NEWS 16
        DEC 27
                 CA/CAplus enhanced with more pre-1907 records
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NEWS 18
         JAN 08
                 CHEMLIST enhanced with New Zealand Inventory of Chemicals
                 CA/CAplus Company Name Thesaurus enhanced and reloaded
NEWS 19
         JAN 16
NEWS 20
         JAN 16
                 IPC version 2007.01 thesaurus available on STN
                 WPIDS/WPINDEX/WPIX enhanced with IPC 8 reclassification data
NEWS 21
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NEWS 22
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                 CA/CAplus updated with revised CAS roles
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                 CA/CAplus enhanced with patent applications from India
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NEWS 24
                 PHAR reloaded with new search and display fields
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NEWS 25
        JAN 29
                 multiple databases
         FEB 13
NEWS 26
                 CASREACT coverage to be extended
NEWS 27
         Feb 15
                 PATDPASPC enhanced with Drug Approval numbers
NEWS 28
         Feb 15
                 RUSSIAPAT enhanced with pre-1994 records
NEWS 29
         Feb 23
                 KOREAPAT enhanced with IPC 8 features and functionality
         Feb 26
                 MEDLINE reloaded with enhancements
NEWS 30
                 EMBASE enhanced with Clinical Trial Number field
NEWS 31. Feb 26
NEWS 32
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                 TOXCENTER enhanced with reloaded MEDLINE
NEWS 33
        Feb 26
                 IFICDB/IFIPAT/IFIUDB reloaded with enhancements
NEWS 34
        Feb 26
                 CAS Registry Number crossover limit increased from 10,000
                 to 300,000 in multiple databases
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